

What is claimed is:

 A method for spreading data, the method comprising the steps of: determining a transmission rate;

determining a spreading code, wherein the spreading code has a length based on the transmission rate; and spreading data with the spreading code.

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2. The method of claim 1 wherein the step of determining the spreading code comprises the step of determining the spreading code, wherein the spreading code has a length and a value based upon the transmission rate.

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3. The method of claim 1 wherein the step of determining the transmission rate comprises the step of determining a transmission rate wherein the transmission rate is taken from the group consisting of eighth, half, and full rate transmission.

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- 4. The method of claim 1 wherein the step of spreading data with the spreading code comprises the step of exclusive OR'ing the data with the spreading code.
- 5. The method of claim 1 wherein the step of determining atransmission rate comprises the step of determining a voice coder (vocoder) transmission rate.
 - 6. A method for despreading data, the method comprising the steps of: determining a transmission rate;

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determining a spreading code, wherein the spreading code has a length based upon the transmission rate; and despreading data with the spreading code.

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- 7. The method of claim 6 wherein the step of determining the spreading code comprises the step of determining the spreading code, wherein the spreading code has a length and a value based upon the transmission rate.
- 8. The method of claim 6 wherein the step of determining the transmission rate comprises the step of determining a transmission rate wherein the transmission rate is taken from the group consisting of eighth, half, and full rate transmission.
- 9. The method of claim 6 wherein the step of despreading data with the spreading code comprises the step of exclusive OR'ing the data with the spreading code.
- 10. The method of claim 6 wherein the step of determining the transmission rate comprises the step of determining a voce coder (vocoder) transmission rate.
 - 11. An apparatus comprising:

a code generator outputting a spreading code, wherein the spreading code has a length dependent upon a transmission rate; and

exclusive OR'ing circuitry having the spreading code and data as an input, and outputting spread data.

- 12. The apparatus of claim 11 wherein the spreading code additionallyhas a value dependent upon the transmission rate.
 - 13. The apparatus of claim 11 wherein the transmission rate is taken from the group consisting of eight rate, half rate, and full rate transmission.
- 30 14. The apparatus of claim 11 wherein the transmission rate is a voice coder (vocoder) transmission rate.



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15. An apparatus comprising:

a first despreader having data as an input and outputting the data exclusive OR'd with a first spreading code having a first value and a first length;

a second despreader having the data as an input and outputting the data exclusive OR'd with a second spreading code having a second value and a second length;

a first Viterbi decoder having the data exclusive OR'd with the first spreading code as an input and outputting decoding metrics to a rate determiner; and

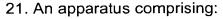
a second Viterbi decoder having the data exclusive OR'd with the second spreading code as an input and outputting decoding metrics to the rate determiner.

- 16. The apparatus of claim 15 wherein the first despreader is a ½ rate despreader.
- 17. The apparatus of claim 16 wherein the second despreader is a 1/4 rate despreader.
- 18. The apparatus of claim 17 wherein the first Viterbi decoder is a ½ rate Viterbi decoder.
- 19. The apparatus of claim 15 wherein the second Viterbi decoder is a 25 1/4 rate Viterbi decoder.
 - 20. The apparatus of claim 15 wherein the rate determiner is a voice encoder (vocoder) rate determiner.

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a convolutional encoder having data as an input and outputting convolutionally encoded data; and

a symbol spreader having the convolutionally encoded data and a transmission rate as an input and outputting spread symbols, wherein the spread symbols are spread with a spreading code dependent upon the transmission rate.

22. The apparatus of claim 21 further comprising:

a block interleaver having the spread symbols as an input and outputting interleaved spread symbols.

- 23. The apparatus of claim 21 wherein the transmission rate is taken from the group consisting of full, half, quarter, and eighth rate transmission.
- 24. The apparatus of claim 21 wherein the transmission rate is a voice coder (vocoder) transmission rate.